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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,232	07/14/2003	Bert W. Slater	BWS01	5824

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EXAMINER

MAYO, TARA L

ART UNIT PAPER NUMBER

3671

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

**Office Action Summary**

Application No.

10/619,232

Applicant(s)

SLATER, BERT W.

Examiner

Tara L. Mayo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 15-20 is/are allowed.
- 6) ☒ Claim(s) 7,8,10,12-14 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 9 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 27 October 2004. These drawings are acceptable.

### *Specification*

2. The *prior* objections to the Specification have been overcome by the response filed 27 October 2004.
3. The abstract of the disclosure is objected to because it refers to purported merits of the invention and compares the invention with the prior art. Correction is required. See MPEP § 608.01(b).

Delete “novel” throughout.

On lines 4 through 5, delete “and characterized...integrity features.”

On line 8, delete “then” and insert therefor --than--.

### *Claim Objections*

4. Claim 10 is objected to because of the following informalities: minor grammatical error. On line 1, change the language to read --through an aperture--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The prior rejection of claims 12 through 14 has been overcome by the response filed 17 October 2004.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 7, 8, 10, 21, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Robertson, Jr. et al. (U.S. Patent No. 6,682,268 B2).

Robertson, Jr. et al. '268, as seen in Figure 3, disclose in combination with a roof bolt and associated base plate used for support in an underground mine, the improvement comprising:

with regard to claim 7,

a round dome-shaped bearing plate (100) having an extended lateral surface for contacting an inside roof of an underground mine, and further defining an aperture therethrough such that said roof bolt can be passed through said bearing plate and the aperture

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of said bearing plate to secure said bearing plate to the inside roof of said underground mine, with said bearing plate interposed between said roof bolt and said inside roof of said underground mine; and with regard to claim 8,

wherein said bearing plate has a substantially circular or elliptical configuration.

With regard to claim 10, the method steps recited therein are inherent to the installation of the device shown by Robertson, Jr. et al. '268.

Robertson, Jr. et al. '268, as seen in Figure 3, disclose an apparatus for providing roof support in an underground mine, comprising: with regard to claim 21,

a round, dome-shaped bearing plate (100) having an extended lateral surface for contacting an inside roof of an underground mine;

a center aperture (101) in said bearing plate for accommodating a roof bolt (120) such that said roof bolt can be passed through said bearing plate to secure said bearing plate to the roof of said underground mine;

wherein said roof bolt passing through said bearing plate is adapted such that said bearing plate is interposed between said roof bolt and the inside roof of said underground mine;

wherein said bearing plate is recessed and said extended lateral surface comprises a circular configuration in the general form of a plate; and

wherein said bearing plate features a center deflection with respect to the radial edge of said bearing plate such that said bearing plate is convex with respect to the mine surface.

Robertson, Jr. et al. '268, as seen in Figure 3, in combination with a roof bolt (120) used for primary roof support in an underground mine, the improvement comprising:  
with regard to claim 23,

a round dome-shaped bearing plate (100) having an extended lateral surface for contacting an inside roof of an underground mine, and further defining an aperture (101) therethrough such that said roof bolt can be passed through said aperture of said bearing plate to secure said bearing plate to the inside roof of said underground mine, with said bearing plate interposed between said roof bolt head and the inside roof of said underground mine, wherein said bearing plate has a substantially circular configuration, and said bearing plate features a center deflection with respect to the radial edge of said bearing plate such that said bearing plate is convex with respect to the mine roof surface.

With regard to claim 24, the method steps recited therein are inherent to the use of the device shown by Robertson, Jr. et al. '268.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a

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person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 12 through 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rubenacker (U.S. Patent No. 6,282,857 B1) in view of Robertson, Jr. et al. (U.S. Patent No. 6,682,268 B2).

Rubenacker '857, as seen in Figures 1 through 11, shows a roof bolt apparatus comprising:

with regard to claim 12,

a dome-shaped bearing plate (20);

a recessed center (24) higher than the outer rim (46), wherein said center remains recessed until forced and put under pressure; and

a plurality of strengthening ribs (38) to adjust the strength as needed for heavier or broken roof conditions;

with regard to claim 13,

further comprising an outer rim only as wide as the material used to produce the plates;

and

with regard to claim 14,

wherein said roof bolt plate comprises a positive pressure roof support.

Rubenacker '857 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claim 12,

the dome-shaped bearing plate being round or oval.

Robertson, Jr. et al. '268, as seen in Figure 3, show a bearing plate apparatus comprising a round dome-shaped bearing plate.

With regard to claim 12, it would have been obvious to one having ordinary skill in the art load bearing structures at the time the invention was made to modify the device shown by Rubenacker '857 such that it would be of a round or oval shape as suggested by Robertson, Jr. et al. '268 since it has been held that a change in shape, absent persuasive evidence that a particular configuration is significant, is a matter of choice within the level of ordinary skill in the art. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson, Jr. et al. (U.S. Patent No. 6,682,268 B2) in view of Rubenacker (U.S. Patent No. 6,282,857 B1).

Robertson, Jr. et al. '268, as seen in Figure 3, disclose an apparatus for providing roof support in an underground mine, comprising:

with regard to claim 22,

a round, dome-shaped bearing plate (100) having an extended lateral surface for contacting an inside roof of an underground mine;

a center aperture (101) in said bearing plate for accommodating a roof bolt (120) such that said roof bolt can be passed through said bearing plate to secure said bearing plate to the roof of said underground mine;



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wherein said roof bolt passing through said bearing plate is adapted such that said bearing plate is interposed between said roof bolt and the inside roof of said underground mine;

wherein said bearing plate has a circular configuration in the form of a plate; and

wherein said bearing plate features a center deflection with respect to the radial edge of said bearing plate such that said bearing plate is convex with respect to the mine roof surface.

***Allowable Subject Matter***

11. Claims 1 through 6 and 15 through 20 are allowed.

12. Claims 9 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Response to Arguments***

14. In response to applicant's arguments, the recitation of a "primary roof support system" in claim 7 has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the

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purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to Applicant's statements that the system shown by Robertson, Jr. et al. '268 fails to teach a method for providing a primary support system as required by Claim 10, the claim requires the recited steps but is not exclusive of further steps not recited in the claim. Therefore, the method as claimed is anticipated by the installation of the device shown by Robertson et al. '268.

In response to applicant's argument that Rubenacker '857 fails to teach a plate for use in an underground mine, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

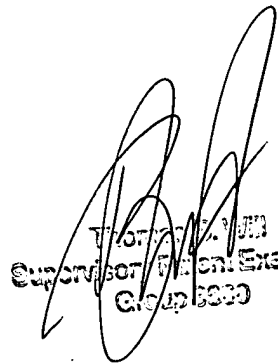
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25 January 2005

  
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